

Claims

1. Process for isolating a purified biological material comprising the following steps:
 - 5 a) placing biological materials in separate lysis vessels of a lysis unit comprising two or several lysis vessels in a predetermined geometric arrangement,
 - b) adding lysis liquids to the biological materials in the lysis vessels,
 - c) transferring the liquids in the lysis vessels into a matrix unit containing
10 matrix vessels with outlet openings whose number corresponds to the number of lysis vessels and a matrix is located in each of the matrix vessels to which the biological material to be purified binds,
 - d) extracting the liquids in the matrix vessels through the outlet openings during which the liquids flow through the matrices,
 - e) placing the matrix unit on a collecting unit with collecting vessels which
15 are arranged such that at least the outlet openings of the matrix vessels extend into the collecting vessels,
 - f) filling the matrix vessels with elution fluid,
 - g) extracting the elution fluids from the matrix vessels through their outlet
20 openings during which the elution fluids flow through the matrices and the elution fluids which are enriched with biological material are collected in the collecting vessels.
2. Process as claimed in claim 1, in which the liquids in the matrix vessels are extracted by centrifugation.

3. Process as claimed in claim 1, wherein the collecting unit is closed by a closure unit after removing the matrix unit.
 4. Process as claimed in claim 1, wherein biological materials are added to the lysis vessels by only opening the lysis vessel into which material is to be added and the other lysis vessels of the lysis unit are leaned to or closed.
 5. Process as claimed in claim 1, wherein the caps of the matrix unit are in the leaned-to position before addition of the lysis liquids, a cap is opened for the addition and is brought into the closed position after the addition.
 6. Process as claimed in claim 1 comprising the steps:
 - 10 a) storing data which identify a biological sample,
 - b) allocating the data relating to the biological sample to data which identify the lysis unit as well as the position of the lysis vessel within the lysis unit into which the sample is added,
 - c) allocating data which identify the matrix unit into which the lysis liquids are added to data which identify the lysis unit,
 - 15 d) allocating data which either
 - identify the collecting unit in which the elution liquid from the matrix unit is collected or
 - which identify the closure unit used to close the collecting unit to the data for the matrix unit.
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7. Process as claimed in claim 6, in which liquids are transferred from the lysis unit into the matrix unit by removing liquid from a lysis vessel and adding it to the matrix vessel of the matrix unit that is in a corresponding position.
8. Closure arrangement for vessels comprising
- 5 - a hinged cap which closes a vessel opening, wherein
- the hinged cap has a cap plate which is attached via a hinge to a vessel or a holding region and a bulge is located on the cap plate which is used to seal the vessel opening,
- 10 - a hook plate on which a hook is located is attached to the cap plate via a hinge and
- a projection is attached to the vessel under which the hook can be hooked.
9. Closure arrangement as claimed in claim 8, wherein the projection has the shape of a ring into which the hook can be hooked.
10. Closure arrangement as claimed in claim 8, in which the bulge on the cap plate has the shape of a truncated cone or a spherical segment.
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11. Closure arrangement as claimed in claim 8, wherein the cap plate and vessel are connected together via a flexible element which is stretched up to a dead point when the cap is lowered and at least partially relaxes when it is swung further.
- 20 12. Closure arrangement as claimed in claim 8, wherein the bulge is composed of an at least partially flexible material such that when the cap is closed a pressure in the vessel causes a deformation of the bulge which improves the seal between the bulge and vessel rim.

13. Closure arrangement as claimed in claim 10, wherein the bulge is composed of an at least partially flexible material such that when the cap is closed a pressure in the vessel causes a deformation of the bulge which improves the seal between the bulge and vessel rim.